



**RAW SEQUENCE LISTING**  
**ERROR REPORT**

**10/506796**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

10506, 796  
BST  
9/14/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS.

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):  
U.S. Patent and Trademark Office, 220 20<sup>th</sup> Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

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# Sequence Listing Error Summary

## ERROR DETECTED

## SUGGESTED CORRECTION

SERIAL NUMBER: 10/506,796

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics  
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino  
Numbering The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing
- 6 PatentIn 2.0  
"bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s). Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences  
(OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO: X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES" response to include the skipped sequences
- 8 Skipped Sequences  
(NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  
<210> sequence id number  
<400> sequence id number  
000
- 9 Use of n's or Xaa's  
(NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents
- 10 Invalid <213>  
Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220>  
  
Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 07/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0  
"bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

AMC - Biotechnology Systems Branch - 09/09/2003

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PCT

## RAW SEQUENCE LISTING

DATE: 09/14/2004

PATENT APPLICATION: US/10/506,796

TIME: 10:12:33

Input Set : A:\112624-00080 Utility.txt

Output Set: N:\CRF4\09142004\J506796.raw

3 <110> APPLICANT: Arizona Board of Regents, on behalf of Arizona State  
 4 University  
 6 <120> TITLE OF INVENTION: COMPOSITION AND METHOD FOR ENHANCING IMMUNE RESPONSE  
 8 <130> FILE REFERENCE: 112624.00080  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/506,796  
 C--> 10 <141> CURRENT FILING DATE: 2004-09-03  
 10 <150> PRIOR APPLICATION NUMBER: PCT/US03/07073  
 11 <151> PRIOR FILING DATE: 2003-03-06  
 13 <150> PRIOR APPLICATION NUMBER: 60/362,247  
 14 <151> PRIOR FILING DATE: 2002-03-06  
 16 <160> NUMBER OF SEQ ID NOS: 9  
 18 <170> SOFTWARE: PatentIn version 3.2  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 35  
 22 <212> TYPE: PRT  
 23 <213> ORGANISM: Human immunodeficiency virus type 1  
 26 <220> FEATURE:  
 27 <221> NAME/KEY: PEPTIDE  
 28 <222> LOCATION: (1)..(35)  
 29 <223> OTHER INFORMATION: HIV-1 gp41 peptide portion (residues 650-685)  
 31 <400> SEQUENCE: 1  
 33 Ser Gln Thr Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp  
 34 1 5 10 15  
 37 Lys Trp Ala Ser Leu Trp Asn Trp Phe Asp Ile Thr Asn Trp Leu Trp  
 38 20 25 30  
 41 Tyr Ile Lys  
 42 35  
 45 <210> SEQ ID NO: 2  
 46 <211> LENGTH: 6  
 47 <212> TYPE: PRT  
 48 <213> ORGANISM: Human immunodeficiency virus type 1  
 51 <220> FEATURE:  
 52 <221> NAME/KEY: PEPTIDE  
 53 <222> LOCATION: (1)..(6)  
 54 <223> OTHER INFORMATION: HIV-1 gp41 peptide portion (residues 663-668)  
 56 <400> SEQUENCE: 2  
 58 Glu Leu Asp Lys Trp Ala  
 59 1 5  
 62 <210> SEQ ID NO: 3  
 63 <211> LENGTH: 36  
 64 <212> TYPE: PRT  
 65 <213> ORGANISM: Human immunodeficiency virus type 1  
 67 <400> SEQUENCE: 3

Does Not Comply  
 Corrected Diskette Needed

(pg. 3)

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Input Set : A:\112624-00080 Utility.txt

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```

69 Cys Ser Gln Thr Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu
70 1          5          10          15
73 Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe Asp Ile Thr Asn Trp Leu
74          20          25          30
77 Trp Tyr Ile Lys
78          35
81 <210> SEQ ID NO: 4
82 <211> LENGTH: 36
83 <212> TYPE: PRT
84 <213> ORGANISM: Human immunodeficiency virus type 1
87 <220> FEATURE:
88 <221> NAME/KEY: PEPTIDE
89 <222> LOCATION: (1)..(35)
90 <223> OTHER INFORMATION: HIV-1 isolate MN clone v5 (residues 649-685)
92 <400> SEQUENCE: 4
94 Ser Gln Thr Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Gly Leu Asp
95 1          5          10          15
98 Lys Trp Glu Ser Leu Trp Asn Trp Phe Asp Ile Thr Asn Trp Leu Trp
99          20          25          30
102 Tyr Ile Lys Ile
103          35
106 <210> SEQ ID NO: 5
107 <211> LENGTH: 36
108 <212> TYPE: PRT
109 <213> ORGANISM: Human immunodeficiency virus type 1
112 <220> FEATURE:
113 <221> NAME/KEY: PEPTIDE
114 <222> LOCATION: (1)..(36)
115 <223> OTHER INFORMATION: HIV-1 isolate 593 clone (residues 649-685)
117 <400> SEQUENCE: 5
119 Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp
120 1          5          10          15
123 Lys Trp Ala Gly Leu Trp Asn Trp Phe Glu Ile Thr Asn Trp Leu Trp
124          20          25          30
127 Tyr Ile Lys Ile
128          35
131 <210> SEQ ID NO: 6
132 <211> LENGTH: 36
133 <212> TYPE: PRT
134 <213> ORGANISM: Human immunodeficiency virus type 1
137 <220> FEATURE:
138 <221> NAME/KEY: PEPTIDE
139 <222> LOCATION: (1)..(36)
140 <223> OTHER INFORMATION: HIV-1 isolate 98BRRS012 (residues 649-685)
142 <400> SEQUENCE: 6
144 Ser Gln Asn Gln Gln Glu Lys Asn Glu His Glu Leu Leu Glu Leu Asp
145 1          5          10          15
148 Lys Trp Ala Asn Leu Trp Asn Trp Phe Asp Ile Thr Asn Trp Leu Trp
149          20          25          30

```

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Input Set : A:\112624-00080 Utility.txt

Output Set: N:\CRF4\09142004\J506796.raw

152 Tyr Ile Lys Ile  
 153 35  
 156 <210> SEQ ID NO: 7  
 157 <211> LENGTH: 36  
 158 <212> TYPE: PRT  
 159 <213> ORGANISM: Human immunodeficiency virus type 1  
 162 <220> FEATURE:  
 163 <221> NAME/KEY: PEPTIDE  
 164 <222> LOCATION: (1)..(36)  
 165 <223> OTHER INFORMATION: HIV-1 isolate 1924v3.20 (residues 649-685)  
 167 <400> SEQUENCE: 7  
 169 Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Asp Leu Leu Glu Leu Asp  
 170 1 5 10 15  
 173 Lys Trp Ala Ser Leu Trp Asn Trp Phe Asp Ile Ser Asn Trp Leu Trp  
 174 20 25 30  
 177 Tyr Ile Lys Ile  
 178 35  
 181 <210> SEQ ID NO: 8  
 182 <211> LENGTH: 522  
 183 <212> TYPE: DNA  
 184 <213> ORGANISM: Artificial Sequence  
 186 <220> FEATURE:  
 187 <223> OTHER INFORMATION: Artificial Sequence  
 189 <400> SEQUENCE: 8  
 190 ccatggctat caagctcaag tttggagtgt tcttcactgt gctccttagc tctgcctatg 60  
 192 cacatggcac cccacaaaac atcactgact tgtgtgctga gtaccacaac acccaaattcc 120  
 194 acaaccctca atgacaagat ctttagctac accgagagcc ttgctggcaa gagggagatg 180  
 196 gctatcatcc cttcaagaat ggtgctacct tccaagtggg ggtgcctgga agccaacaca 240  
 198 ttgatagcca aaagaaggcc attgagagga tgaaggacac attaggatag cttacctcac 300  
 200 tgaggctaag gtggagaagc tttgtgtgtg gaacaacaag actccacatg ctattgctgc 360  
 202 cattagcatg gcaaattggtc ctggaccttc ccaaacccaa caagagaaga atgagcaaga 420  
 204 gcttttggag ttggacaagt ggcaagcctt tgggaattggt ttgacatcac caattggcct 480  
 206 tggatatatca agatctctga gaaggatgaa ctctaagagc tc 522  
 209 <210> SEQ ID NO: 9  
 210 <211> LENGTH: 171  
 211 <212> TYPE: PRT  
 212 <213> ORGANISM: Artificial Sequence  
 214 <220> FEATURE:  
 215 <223> OTHER INFORMATION: Artificial Sequence  
 217 <400> SEQUENCE: 9  
 219 Met Ala Ile Lys Leu Lys Phe Gly Val Phe Phe Thr Val Leu Leu Ser  
 220 1 5 10 15  
 223 Ser Ala Trp Ala His Gly Thr Pro Gln Asn Ile Thr Asp Leu Cys Ala  
 224 20 25 30  
 227 Glu Tyr His Asn Thr Gln Ile His Thr Leu Asn Asp Lys Ile Phe Ser  
 228 35 40 45  
 231 Tyr Thr Glu Ser Leu Ala Gly Lys Arg Glu Met Ala Ile Ile Thr Phe  
 232 50 55 60  
 235 Lys Asn Gly Ala Thr Phe Gln Val Glu Val Pro Gly Ser Gln His Ile

Pls explain source of genetic material.

Invalid Response

see item #11 on error summary sheet.

Pls explain source of genetic material.

Invalid Response

Pls see

item #

11 on

= error summary sheet.

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Input Set : A:\112624-00080 Utility.txt

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236	65					70					75					80
239	Asp	Ser	Gln	Lys	Lys	Ala	Ile	Glu	Arg	Met	Lys	Asp	Thr	Leu	Arg	Ile
240					85					90					95	
243	Ala	Thr	Leu	Thr	Glu	Ala	Lys	Val	Glu	Lys	Leu	Cys	Val	Trp	Asn	Asn
244				100						105					110	
247	Lys	Thr	Pro	His	Ala	Ile	Ala	Ala	Ile	Ser	Met	Ala	Asn	Gly	Pro	Gly
248			115						120					125		
251	Pro	Ser	Gln	Thr	Gln	Gln	Glu	Lys	Asn	Glu	Gln	Glu	Leu	Leu	Glu	Leu
252		130					135					140				
255	Asp	Lys	Trp	Ala	Ser	Leu	Trp	Asn	Trp	Phe	Asp	Ile	Thr	Asn	Trp	Leu
256	145					150					155					160
259	Trp	Tyr	Ile	Lys	Ile	Ser	Glu	Lys	Asp	Glu	Leu					
260					165					170						

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/506,796

DATE: 09/14/2004

TIME: 10:12:34

Input Set : A:\112624-00080 Utility.txt

Output Set: N:\CRF4\09142004\J506796.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No  
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date